IT Services Mega Trends

Seamless, Secure, Context-Aware Experiences in a Connected World

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WE ARE AT THE CUSP OF A NEW WAVE

Moving from Networked to Seamlessly Connected, from Compute to Cloud, from Terabytes to Exabytes, from Months to Minutes, from …
IT BEHAVIOR IS SHIFTING
The Rules Have Changed

<table>
<thead>
<tr>
<th>Many Current Enterprises</th>
<th>Most Future Enterprises will also</th>
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<tr>
<td>• Focus on control of assets, cost reduction</td>
<td>+ Focus on variabalizing non-core assets to lower cost and increase flexibility</td>
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<td>• Pace of change is measured in months/weeks</td>
<td>+ Significant events happen in hours, minutes, seconds</td>
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<td>• Human-actor, labor-intense process and decisions</td>
<td>+ Light human touch, data/fact-based automated process and decisions</td>
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<td>• Reactive, post-transaction business intelligence</td>
<td>+ Predictive, real-time analytics</td>
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<td>• Efficient and optimized operations</td>
<td>+ Flexible, effective and social interactions</td>
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<td>• Data overloaded, opaque and transactional</td>
<td>+ Information rich, collaborative, transparent and continuous</td>
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<td>• Human experience drives change</td>
<td>+ Intelligent and learning systems</td>
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The future is additive, not a substitute for the present.
THE DYNAMIC ENTERPRISE
Seamless, Secure, Context-Aware Experiences in a Connected World

As expectations of the enterprise change ...

new models enable economical delivery of new experiences ...

that are context aware, seamless and secure.
TREND #1 – DYNAMIC ENGAGEMENT
Enterprises Dynamically Engage with Stakeholders, not just Transact

Systems of Record deliver efficient and optimized operations

Dynamic People Engagement drives innovation

Dynamic Systems create seamless integration

Dynamic Business Engagement drives B2B events

Systems of Engagement create dynamic interfaces with all stakeholders

Dynamic Systems of Record and Systems of Engagement will co-exist

Consumerization of IT creates a culture of collaboration

Dynamic Engagement across the three layers is critical
TREND #2 — DYNAMIC ECOSYSTEM
Everything Connected and Instant-On

Deep relationships with partners, suppliers and customers

Global, virtual resources, dynamically managed

One-to-one, context-relevant relationships with consumers

Global customers & operations

Global, intense risks

Global virtual workforce

Continuous or “on-event” interactions

To anyone or anything, anywhere

Exabytes from embedded, sensors, devices

Intimate information-sharing

Blurred roles & responsibilities

Seamless, integrated security

Transparency & Governance across the ecosystem

Extended Enterprise

Extended Geography

Extended Risks

Extended Workforce

Extended Frequency

Extended Reach

Extended Data Sources

Extended Security

Extended Info-Flow

Extended Roles
TREND #3 – DYNAMIC RESOURCING
Cloud Computing Fundamentally Shifts Role of IT

Value Comes From
• Greater flexibility of resource management
• Linking IT expense to operating metrics
• Shifting IT spend from CAPEX to OPEX
• Shifting investments to core assets
• Shifting focus to innovation

Challenges include
• Fundamental role of CIO changes
• IT resourcing decisions shift
• IT complexity increases
• Security and continuity concerns

Platforms-as-a-Service
Business Processes-as-a-Service
Software-as-a-Service
Information-as-a-Service

Infrastructure-as-a-Service

Simultaneous External, Hybrid, and Private Clouds

Security, Continuity and Reliability are key considerations
TREND #4 – DYNAMIC ANALYTICS
Big Data Meets Real-Time Predictive Analytics

Social computing will generate up to 50% of new data

Real-time, not static information flow

Deep, continuous, intimate info-flow from partners

Structured previously semi- and unstructured data

Embedded intelligence generates location-specific interaction with physical world

Analytics will be both central and distributed

Analytics speed the time from data to decisions
accurate, timely, interactive and economic
TREND #5 – DYNAMIC AUTOMATION
Automation Drives Optimization Across Value Chain

What and why we automate is a critical thinking exercise

Automation addresses white-collar processes

Human-actors manage the systems that manage the enterprise

IT automation is critical in moving to the next level of IT services

Business process automation affects every element of the enterprise

Systems of automation will deliver replicable, scalable, optimized outcomes that are designed for continuous improvement

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TREND #6 – DYNAMIC SECURITY

Security is Seamless, Integrated and Pervasive

Mobile devices, embedded intelligence, social networks increasing exposure

Sophistication of threats rapidly increasing

2010 cost per exposure = $6.75M USD

Potential impact on financial, brand, reputation – even company viability

Sophistication of businesses and consumers decreasing

Built into solutions, not an afterthought

Enable interaction, not constrain it

Key Outcomes: Assurance and compliance

To be effective, everyone must participate

Key Criteria: Identity, context and role-based

Security in an always on, connected world requires a more pervasive approach to protecting, enabling and safeguarding access to systems, information and related infrastructure.
THE DYNAMIC ENTERPRISE IS INSTANT-ON

Operationally Independent and Ecosystem Integrated
Globally Leveraged and Operationally Secure
Inside Company and Anywhere Needed
Social Networks for Personal and Enterprise
Operational Efficiency and Market Flexibility
Transactions and Interactions
People Leveraged and Systems Automated
Security and Business Enablement
Private and Personalized
THE DYNAMIC ENTERPRISE REQUIRES . . .

- Enterprise Social Computing
- Distributed Computing
- Pervasive Sensing
- Exabyte Data Management
- Intelligent Infrastructure
- Mobile Capabilities
- Point-of-engagement Analytics
- Ubiquitous Automation
- Modeling & Simulation
- Cloud Services
- Engagement Security & Privacy
- Dynamic Leadership
- Culture of Engagement